

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-9. (Canceled)

10. (Currently Amended) A method for producing a single crystal by Czochralski method by pulling a seed crystal from a raw material melt, comprising:

immersing ~~a seed~~ the seed crystal into ~~a raw~~ the raw material melt; and  
growing ~~a single~~ the single crystal by rotating and pulling the seed crystal,

wherein:

the single crystal is pulled ~~with controlling~~ while controlling a value of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ) within a ~~determined range of values of~~  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ); and

the range of ~~a value~~ values of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ), including a ~~desired defect~~ region and/or a ~~desired defect-free~~ region, is ~~determined~~ controlled according to  $T_{\text{max}}$  ( $^{\circ}\text{C}$ );

wherein:

$V(\text{mm}/\text{min})$  is ~~the single~~ a single crystal pulling rate of pulling ~~a single~~ the single crystal;

$G (\text{K}/\text{mm})$  is a temperature gradient at a solid-liquid interface, in a range of a melting point of the raw material and  $1400^{\circ}\text{C}$ ;

$T_{\text{max}} (^{\circ}\text{C})$  is ~~the highest~~ a highest temperature of the raw material melt at an interface between a quartz crucible inner wall and ~~a raw~~ the raw material melt; and

the range of ~~a value~~ values of  $V/G$  ( $\text{mm}^2/\text{K} \cdot \text{min}$ ) is selected from ~~a~~ the group consisting of:

from  $-0.000724 [\text{mm}^2/(^{\circ}\text{C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (^{\circ}\text{C}) + 1.31$   
( $\text{mm}^2/\text{K} \cdot \text{min}$ ) to less than  $-0.000724 [\text{mm}^2/(^{\circ}\text{C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (^{\circ}\text{C}) + 1.38$   
( $\text{mm}^2/\text{K} \cdot \text{min}$ );

$$-0.000724 [\text{mm}^2/(\text{°C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (\text{°C}) + 1.38$$

( $\text{mm}^2/\text{K} \cdot \text{min}$ ) or more; and

$$\text{from } -0.000724 [\text{mm}^2/(\text{°C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (\text{°C}) + 1.31$$

( $\text{mm}^2/\text{K} \cdot \text{min}$ ) to  $-0.000724 [\text{mm}^2/(\text{°C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (\text{°C}) + 1.35 (\text{mm}^2/\text{K} \cdot \text{min})$ .

11-13. (Canceled)

14. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with the  $T_{\text{max}} (\text{°C})$  being in a range of 1560 °C or less.

15-17. (Canceled)

18. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein, at least, the  $T_{\text{max}} (\text{°C})$  is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

19-21. (Canceled)

22. (Previously Presented) The method for producing a single crystal according to Claim 14, wherein, at least, the  $T_{\text{max}} (\text{°C})$  is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

23-25. (Canceled)

26. (Currently Amended) The method of producing a single crystal according to Claim 10, wherein ~~a silicon single crystal is pulled as the single crystal~~ crystal that is pulled is a silicon single crystal.

27. (Currently Amended) The method of producing a single crystal according to Claim 10, wherein ~~a single the single crystal with that is pulled has a diameter of 200mm or more is pulled as the single crystal.~~ more.

28. (Canceled)